

Application No.: 10/659168
Docket No.: AD6929USNA

Page 4

REMARKS

Claim Objections:

Claims 6-10 have been amended as follows in accordance with the Examiner's suggestion to overcome the objected to informalities:

- a. Claim 6 has been amended to show dependency from claim 5 instead of claim 3.
 - b. Claim 7 has been amended to show dependency from claim 5 or 6 instead of claims 3 or 4.
 - c. Claim 8 has been amended to show dependency from claim 7 instead of claim 5.
 - d. Claim 9 has been amended to show dependency from claim 7 or 8, instead of claims 5 or 6; and
 - e. Claim 10 has been amended to show dependency from claim 9 instead of claim 7.
- These claims are now believed to be in allowable condition.

Claim 2 has been amended to correct dependency from claim 2 to dependency from claim 1 due to a typographical error.

Claim Rejections – 35 USC§102/103:

Claims 1-10 and 12 have been rejected under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Long et al. (US 5,969,083). Applicants disagree. Claim 1 has been amended.

According to the Examiner, Long teaches an LCP with an *onset of melting temperature* in Table 1, column 11. Applicants contend that Long discloses the *melting temperature* as indicated in Table 1, column 11 of Long and not the *onset of melting temperature* as in the present invention. Long defines *melting point* in column 1, lines 37 - 48 as

"all thermoplastic resins are required to undergo flow in the molten state during the course of manufacture..." "...polymer, above the melting temperature, behaves as a fluid rather than as a solid. As described herein, the melt viscosity of thermoplastic polymer systems is a measure of the flow characteristics of the material in the fluid or molten state."

Thus, to one of ordinary skill in the art Long has defined *melting temperature* (T_m) as the point at which the polymer behaves as a *fluid* rather than a *solid*, that is, at a minimum the *peak* of the DSC (differential scanning calorimetry) melting endotherm. This differs greatly from the *onset of melting temperature* used in the present invention, in that there is still significant solid behavior in the present invention at the *onset of melting temperature* which is important to maintaining the integrity of the friction and wear properties.

Application No.: 10/659168
Docket No.: AD6929USNA

Page 5

Furthermore, the examples in Long show the melt viscosity of the polymers to be 345°
C. Applicants contend that reliable melt rheology data cannot be obtained unless the polymer is fluid. Column 4, lines 1 – 21 provide:

"It is preferred that the liquid crystalline polyester has a melting point determined by DSC equal to or less than 360°C....In a preferred embodiment, it is preferred that the liquid crystalline polyester has... a melt viscosity at 345°C..."

Applicants further contend that one of ordinary skill in the art would find that Long has defined the T_m, as the state of total *fluid* behavior which would refer to presumably the end of the DSC melting curve as the T_m, otherwise the melt rheology temperatures could not be lowered to obtain meaningful data. Hence, Long shows an even larger difference between the *onset of the melting temperature* of the present invention and the *melting temperature* used in Long then that described above.

In contrast, claim 1 of the present invention, discloses the *onset of melting temperature*, which is taken at the initiation of the melt. See Table 1, page 5 of the present invention and also on page 5, lines 10 for Applicants' distinction between *melt temperature* and *onset of melting temperature*. Thus, Applicants contend that the Examiner is comparing apples to oranges, that is, *melting temperature* to *onset of melting temperature*, when comparing the values of Long and the present invention. As such the T_m values of Long, which range up to 375 °C in column 11, Table 1 fall outside of the present invention values shown in Table 1, page 5. When extrapolating the value of the *onset melting temperature* of 320° C as claimed in Applicants' invention, the melting temperature is approximately 377 °C, the present invention melting point is outside that of Long. For the above reasons, claim 1 is not anticipated by Long.

For the reasons stated above, Applicants contend Long uses the peak (or end) of the melting endotherm as the *melting point* that differs from the *onset of the melting temperature* used in the present invention. The present invention would not have been obvious for someone of ordinary skill in the art as the *onset of melting temperature* of the present invention is not disclosed by Long.

Furthermore, claims 2-10 and 12 are dependent from claim 1 and are also believed not anticipated nor obvious in view of Long for the same reasons as claim 1. Reconsideration and allowance are respectfully requested.

Allowable Subject Matter:

The Examiner stated that claim 11 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 11 has been so amended and thus is believed to be in allowable condition.

Application No.: 10/659168
Docket No.: AD6929USNA

Page 6

Extension:

A petition under 37 CFR § 1.136 for a one-month extension of time to respond to the Examiner's action is enclosed, the fee should be charged to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company.) If, any additional fee is due in order to obtain consideration of this response, please charge that fee to the above-identified account.

In view of the foregoing, allowance of the above-referenced application is respectfully requested.

Respectfully submitted,

Tamera L. Fair

TAMERA L. FAIR
ATTORNEY FOR APPLICANT
Registration No.: 35,867
Telephone: (302) 892-7948
Facsimile: (302) 992-3257

Dated: March 22, 2005

T:\Parent Documents\Eng. Polymers\AD-69xx\AD6929\AD6929 US NA\AD6929 US NA Amend1.doc